

REMARKS

In order to particularly point out and distinctly claim the subject matter which Applicant considers as the invention, Applicant has canceled claim 1 and substituted new claim 8 therefor, and submitted another new claim 9 in order to more clearly and completely claim subject matter regarded as the invention. Support for new claims 8 and 9 may be found in paragraphs [0031], [0036] and FIGs. 7 and 8 of the originally filed specification.

Claim Rejections –35 USC §102

Claims 1-7 are rejected under 35 U. S. C. 102(a) as being anticipated by U. S. Patent 6,571,934 to Thompson et al. Thompson is cited for disclosing a bi-directional transport (90LT) with shuttles (80, 80A) to position a sample rack at a sampling location on the transport on in a buffer zone (84). Basically, Thompson's transport and shuttles are adapted to magnetically slide a sample rack from an input zone to a sampling or buffering location and then to an output zone for removal by an operator (FIGs. 3 and 8 and Col. 7, line 62 to Col. 4, line 39). In all instances, the sample rack remains on the contiguous top operating surface (76) of an analyzer (10).

Thompson also discloses concentric cuvette carousels (14, 16), however there are express and significant difference between Thompson's cuvette carousel and applicant's container carousels (26A, 26B) both in structure and utility. In particular, applicant's container carousels (26A, 26B) are "operatively interconnected" so that containers may be physically moved between the container carousels (26A, 26B). See row 1 in Table 1, page 15 whereat container RC1 is removed from container carousel 26B and placed onto carousel 26A by the shuttle (72). On the other hand, Thompson's concentric cuvette carousels (14, 16) are simply two concentric circles of cavities (72 or 73 and 74) which hold cuvettes (19) in which clinical assays involving sample and reagents are performed. At Col. 6, line 63-66, Thompson's cuvettes are described as loaded into a cavity by a cuvette load device (60), and unloaded from the cavity by an unload device (62). Nowhere in Thompson is the capability to physically move a cuvette between cavities disclosed nor

would there be any motivation to do so since the cuvettes are simply held in a cavity for an assay and then disposed.

In contrast, as now claimed, applicant's invention is a container supply system having a shuttle for physically removing containers from an input loading tray and replacing the containers into a carousel. Claim 8 also requires a container storage tray (28T seen in FIG. 8 and described as a tray in [0036]) be positioned between the loading tray and the carousel and that the shuttle further comprises means for removing reagent containers from the loading tray and placing containers into the storage area.

Several key features in applicant's container supply system do not counterparts that are disclosed by Thompson.

Applicant's loading tray is an actual tray (29) with a motorized rake (73) and incoming containers are placed therein. Thompson discloses an input loading zone or portion (72L) of an input "lane" (72) "formed along a top operating surface 76 of analyzer 10". (Col.7, lines 62 to Col. 8, line 5).

Applicant's carousels are operatively interconnected so that containers may be physically moved therebetween by shuttle (72). Thompson's carousels are concentric circles of cavities and there is no capability to physically move a cuvette between cavities.

Applicant's container storage tray (28T) is an actual tray that can be translated by another shuttle (28S) [similar in design to shuttle (72) but located beneath shuttle (72)] so as to locate a desired container in tray (28T) at a loading position whereat it may be removed from the tray by shuttle (72) as described in [0031] of the specification. Thompson's buffer zone (84) is a (stationary) contiguous zone or portion of a top operating surface 76 where sample racks are located during aspiration (Col. 8, lines 14-17; lines 52-54).

As claimed, applicant's shuttle (72) is adapted to physically remove containers from the loading tray and replace containers into the carousel or storage tray. Thompson's transport mechanism (90LT) is a magnetic drive system for linearly moving a number of magnetic housings (100) containing a magnet (102) beneath top operating surface (76). See Col. 9, line 23 to Col. 10, line 57). Sample racks (42) contain a magnet (47) and are caused to slide along the top operating surface (76) by moving magnetic housings (100), as

illustrated in FIGs. 10-12. Thus, Thompson's transport mechanism cannot in any manner physically remove containers from the loading tray and replace containers into the carousel or storage tray.

For the reasons explained above, Thompson does not teach, expressly or inherently, each and every element of the as-claimed container supply system having a loading tray, a carousel, a storage tray positioned between the loading tray and the carousel, and a shuttle having means for removing containers from the loading tray and replacing containers into the carousel. Consequently there is no basis for a rejection under 35 U. S. C. 102(a) over U. S. Patent 6,571,934 to Thompson et al, and applicant respectfully requests that this rejection be withdrawn.

Conclusion

Applicants believe that this application contains patentable subject matter and that the foregoing amendments and explanation provide a basis for favorable consideration and allowance of all claims; such allowance is respectfully requested. If any matter needs to be resolved before allowance, the Examiner is encouraged to call Applicant's representative at the number provided below.

Respectfully submitted,



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